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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,049	07/31/2003	Simon James Huckett	1-8-1-1	9977

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Docket Administrator (Room 3J-219)
Lucent Technologies Inc.
101 Crawfords Corner Road
Holmdel, NJ 07733-3030

EXAMINER	
FAROUL, FARAH	
ART UNIT	PAPER NUMBER
2616	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/632,049	HUCKETT ET AL.	
	Examiner	Art Unit	
	Farah Faroul	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,9 and 11-20* is/are rejected.

7)☒ Claim(s) *7,8 and 10* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *09/02/2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant has submitted US Application No. 10/632049 on July 31, 2003. The following office action is based on the US application filed on July 31, 2003 having claims 1-20 and Figures 1-5.

Specification

2. The abstract of the disclosure is objected to because the following minor informalities:

The acronym "ATM" found in lines 10 and 13 of the abstract should be changed to "Asynchronous Transfer Mode (ATM)" on all lines.

Correction is required. See MPEP § 608.01(b).

Claim Objections

3. Claims 7, 9 and 15 are objected to because of the following informalities:

In regards to claims 7 and 9, line 1, it is suggested that applicant insert the word "of" in between "one" and "the processor" to make the claims clear.

In regards to claim 15, it is suggested that applicant deletes the word "the" in between the words "with" and "at least" to make the claim clear.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 11 and 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Wakeland (US 5,943,481) (reference disclosed by applicant).

Regarding claim 1, Wakeland discloses a processor for receiving at least one Network Interface signal, and for recognizing a transport mechanism associated with each Network Interface Signal (column 3, lines 20-27, Figure 1, element 22 wherein a reconfigurable packet processor is configured to recognize any communication protocol); and

A bus interface for generating at least one System interface signal in response to the recognized transport mechanism (figure 4, element 72, column 10, lines 46-63 wherein the bus unit serves as a physical interface between a local bus and a peripheral bus);

Regarding claim 2, Wakeland discloses the method of claim 1 wherein the transport mechanism comprises at least one of Asynchronous Transfer Mode, Internet Protocol, Frame Relay, Integrated Services Digital Network, High bit-rate Digital Subscriber Line, Asymmetric Digital Subscriber Line, Symmetric Digital Subscriber Line, 10 base T, 100 base T, Gigabit Ethernet and E1/T1 (column 3, lines 38-45 wherein the transport mechanism is ATM);

Regarding claim 3, Wakeland discloses the method of claim 2 wherein the processor recognizes the transport mechanism for each Network Interface signal in response to a control signal (column 8, lines 8-14 wherein the processor recognizers the transport mechanism based on control signals sent via the data steering logic)

Regarding claim 4, Wakeland discloses the method of claim 2 wherein the processor further examines a pattern for each Network Interface signal to recognize the associated transport mechanism (column 3, lines 39-48 wherein the processor recognizes fast packets or cells associated with ATM);

Regarding claim 5, Wakeland discloses the method of claim 4 wherein each System Interface signal is coupled with at least one of a circuit switched interface, packet switched interface, and a combined circuit packet switched interface (column 4, lines 64-66 wherein the system is adapted to coupling to a PSTN);

Regarding claim 11, Wakeland discloses the method of claim 5 comprising means for coupling the processor with the bus interface device, the means for coupling processor with the bus interface device, the means for coupling comprising at least one of a serial bus, a parallel bus and shared memory (column 7, lines 52-67 wherein the processor is coupled to a system bus which is coupled to a PMCIA/ROM external bus via the data steering logic block);

Regarding claim 14, Wakeland discloses the method of claim 5 wherein the processor comprises at least one of a field programmable gate array, an application specific integrated circuit, a digital signal processor, a controller and a special purpose

processor (column 8, lines 29-41 wherein the processor comprises of a controller coupled between the system bus and an external bus);

Regarding claim 15, Wakeland discloses the method of claim 5 wherein the bus interface device comprises at least one programmable logic device for interfacing the processor with at least one of a circuit switched interface, a packet switched interface, and a combined circuit packet switched interface (the programmable GPIO logic device (fig 4, element 52) is coupled to system bus 28 for interfacing with various interfaces such as PSTN, column 8, lines 14-41).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 6, 9, 12-13 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wakeland (US 5,943,481) (reference disclosed by applicant) in view of Christie et al. (US 6,788,693 B1).

For claims 6, 9 and 12, Wakeland discloses the entire claimed invention as described in paragraph 4 of this office action except wherein the transport mechanism comprises an adaptation layer of Asynchronous Transfer Mode, the processor performs ATM adaptation layer processing on each Network Interface signal in response to the recognized transport mechanism, wherein at least one of the processor or the bus interface device converts each Network Interface signal to correspond with the packet switched interface and routes each converted Network Interface signal, wherein the processor performs traffic management on each Network Interface signal.

For claims 6, 9 and 12, Christie teaches an interface system linked to a local network by a link to the ATM network wherein the link can be an AAL5 data link, UDP/IP, Ethernet or DS) over T1 (column 9, lines 46-67). The interface system converts calls between the ATM network and the local network (column 10, lines 37-42). The interface system further controls call routing, call processing and call transport (column 10, lines 62-67).

For claims 13, 16-18 and 20, Wakeland discloses the entire claimed invention as described in paragraph 4 of this office action except wherein the processor receives each Network Interface signal from a physical layer input bus device for supporting at least one of an electro- and an opto- scheme, wherein the bus interface device comprises: a circuit switched interface device for buffering, data formatting, and timing

resolution; and a packet switched interface device for supporting protocol conversion, routing and bus access; wherein the bus interface device comprises: a single interface device for buffering, data formatting, and timing resolution if circuit switched and for supporting protocol conversion, routing, and bus access if packet switched, wherein the single interface device supports at least one of a TDM bus and a Packet/Cell bus, wherein the single interface device supports a dynamic bus allocation.

For claims 13, 16-18 and 20, Christie teaches an interface system interworking call signaling between the SS7 format and the GR-303 format, between the SS7 format and the ISDN format, and between GR-303 format and the ISDN format (column 10, lines 51-58). The interface system can convert calls between an optical and an electrical format. The interface system interworks calls, including call signaling and user communications, dynamically on a call-by-call basis in TDM-ATM networks, ATM-ATM networks and TDM-TDM networks (column 10, lines 37-61, Figure 2, element 110).

For claim 19, Wakeland discloses the method of claim 17 wherein the single interface device comprises a programmable logic element (column 8, lines 29-41 wherein the system comprises a programmable GPIO logic device (fig 4, element 52)).

Thus, it would have been obvious to someone of ordinary skill in the art to combine add the method of interfacing a communication device of Christie into the communication network of Wakeland at the time of the invention. The interfacing method of Christie can be modified into the configurable processor of Wakeland (Figure 3, box 22). The motivation to combine interfacing method as taught by Christie into the

communication network of Wakeland is that it provides a universal interface system for networks having different signaling protocols.

Allowable Subject Matter

6. Claims 7-8 and 10 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Parruck et al. (US 6,751,224 B1) and Gardner (US 6,785,282 B1) are cited to show systems pertinent to applicant's invention. Gardner discloses a system and method for connecting a call in a gateway system comprises a signaling processor for processing call signaling to determine connections for the user communications and Parruck discloses an integrated ATM/packet segmentation-and-reassemble engine for handling both packet and ATM input data and outputting packets containing information from both the packet and ATM input data.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Farah Faroul whose telephone number is 571-270-1421. The examiner can normally be reached on Monday - Friday 6:30 AM - 4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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